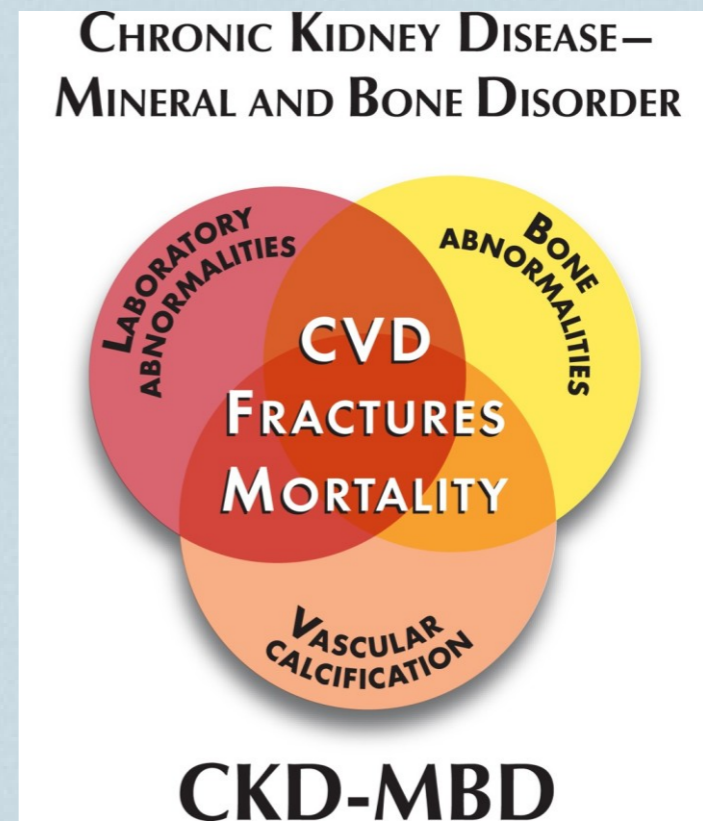


Improvement of mineral status in  
hemodialysis patients in Jolimont  
between November 2009 and  
November 2010

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# Metabolic Bone disease

- Ca<sup>++</sup>, P<sup>-</sup>, iPTH, Vit D
- Very frequent
- Related with high cardiovascular risk (P<sup>-</sup> > 5,5 mg/dl = 27% more mortality)
- Guides lines by K/DOQI



# Aims

- ❖ Make an inventory of phosphocalcic metabolism in our center
- ❖ Determine how to improve treatments (integration of K/DOQI guidelines)
- ❖ Assess what combination is the best

# Methods

- ❖ Prospective work
- ❖ November 2009 = baseline
- ❖ Measure of  $\text{Ca}^{++}$ , P- and PTH in November 2009 and May, Augustus and November 2010.



# Population

November 2009

Number of patients

67

Age

63,33 yrs old

Sex ratio m/f

45/22

Average dialysis time  
(months)

36,03

		November 2009	May 2010	November 2010	P
Calcium elem.	(%patient)	79,1	83,5	77,6	0,8
	G/d	0,85+/-0,55	0,90+/-0,62	0,88	0,23
Sevelamer	(%patient)	40,3	46,2	46,26	0,4
	G/d	3,43+/-1,64	3,12+/-1,56	3,58	0,16
Lanthanum	(%patient)	3,75	2	1,5	
	G/j	1,5	2,5	2	
Cinacalcet	(%patient)	6,25	14,9	13,4	0,18
	Mg/d	72	63	68,5	
Calcitriol	(%patients)	32 %	43,75	43,28	0,13
	Mcg/d	0,23+/-0,09	0,20	0,21	
Native D Vit	(%patient)	7	7,500	12	
	units per months	75000	75000	65312	
Alphacalcidol	(%patient)	1,5	1,5	1,5	

	November 2009	May	Augustus	November 2010	P
Phosphorus					
Average Mg/dL	5,58 +/-1,64	5,37 +/-1,64	5,16 +/-1,63	5,06 +/-1,57	0,01
Corrected calcemia					
Average Mg/dL	8,82 +/-0,87	8,69 +/-0,7	9,13 +/-0,7	9,04 +/-0,84	0,02
PTHi					
Average Pg/mL	455 +/-355,8	515 +/-486	413 +/-340	397 +/-290	0,08

	Nov 2009	May	August	Nov 2010	P value Nov-Nov
<b>Phosphorus</b>					
<3,5	5	7	14	9	0,3
3,5-5,5	28	30	33	37	0,1
>5,5	35	31	20	21	0,008
<b>Calcium</b>					
<8,4	22	23	11	11	0,06
8,4-9,5	31	35	36	39	0,8
>9,6	15	10	20	17	0,12
<b>iPTH</b>					
<149	8	10	12	8	0,8
150-300	26	17	20	25	0,7
301-450	9	13	14	19	0,06
>451	24	27	21	15	0,1



## K /DOQI criteria filled

	November 2009	August 2010	November 2010
One	26	20	25
Two	22	24	24
Three	9 (13%)	15	8 (11,9%)
None	10	8	10

# Conclusions

- ❖ Significant decreasing of P- level, with less hyperphosphatemia, by increasing use of sevelamer
- ❖ Less hypocalcemic patients, but more hypercalcemic due to use of  $\text{CaCO}_3$ . Benefits of analogs of Vit D
- ❖ Decrease of PTH rate, specially with less values  $>450$
- ❖ Difficulty to reach the KDOQI guidelines, but quite good results in our center

Thanks for coming...

